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Why Ethanol Production Will Drive World Food Prices Even Higher in 2008

Lester R. Brown

We are witnessing the beginning of one of the great tragedies of history. The United States, in a misguided effort to reduce its oil insecurity by converting grain into fuel for cars, is generating global food insecurity on a scale never seen before.

The world is facing the most severe food price inflation in history as grain and soybean prices climb to all-time highs. Wheat trading on the Chicago Board of Trade on December 17th breached the $10 per bushel level for the first time ever. In mid-January, corn was trading over $5 per bushel, close to its historic high. And on January 11th, soybeans traded at $13.42 per bushel, the highest price ever recorded. All these prices are double those of a year or two ago.

As a result, prices of food products made directly from these commodities such as bread, pasta, and tortillas, and those made indirectly, such as pork, poultry, beef, milk, and eggs, are everywhere on the rise. In Mexico, corn meal prices are up 60 percent. In Pakistan, flour prices have doubled. China is facing rampant food price inflation, some of the worst in decades.

In industrial countries, the higher processing and marketing share of food costs has softened the blow, but even so, prices of food staples are climbing. By late 2007, the U.S. price of a loaf of whole wheat bread was 12 percent higher than a year earlier, milk was up 29 percent, and eggs were up 36 percent. In Italy, pasta prices were up 20 percent.

World grain prices have increased dramatically on three occasions since World War II, each time as a result of weather-reduced harvests. But now it is a matter of demand simply outpacing supply. In seven of the last eight years world grain production has fallen short of consumption. These annual shortfalls have been covered by drawing down grain stocks, but the carryover stocks—the amount in the bin when the new harvest begins—have now dropped to 54 days of world consumption, the lowest on record. (See data at www.earthpolicy.org/Updates/2008/Update69_data.htm.)

From 1990 to 2005, world grain consumption, driven largely by

population growth and rising consumption of grain-based animal products, climbed by an average of 21 million tons per year. Then came the explosion in demand for grain used in U.S. ethanol distilleries, which jumped from 54 million tons in 2006 to 81 million tons in 2007. This 27 million ton jump more than doubled the annual growth in world demand for grain. If 80 percent of the 62 distilleries now under construction are completed by late 2008, grain used to produce fuel for cars will climb to 114 million tons, or 28 percent of the projected 2008 U.S. grain harvest.

Historically the food and energy economies have been largely separate, but now with the construction of so many fuel ethanol distilleries, they are merging. If the food value of grain is less than its fuel value, the market will move the grain into the energy economy. Thus as the price of oil rises, the price of grain follows it upward.

A University of Illinois economics team calculates that with oil at $50 a barrel, it is profitable—with the ethanol subsidy of 51¢ a gallon (equal to $1.43 per bushel of corn)—to convert corn into ethanol as long as the price is below $4 a bushel. But with oil at $100 a barrel, distillers can pay more than $7 a bushel for corn and still break even. If oil climbs to $140, distillers can pay $10 a bushel for corn—double the early 2008 price of $5 per bushel.

The World Bank reports that for each 1 percent rise in food prices, caloric intake among the poor drops 0.5 percent. Millions of those living on the lower rungs of the global economic ladder, people who are barely hanging on, will lose their grip and begin to fall off.

Projections by Professors C. Ford Runge and Benjamin Senauer of the University of Minnesota four years ago showed the number of hungry and malnourished people decreasing from over 800 million to 625 million by 2025. But in early 2007 their update of these projections, taking into account the biofuel effect on world food prices, showed the number of hungry people climbing to 1.2 billion by 2025. That climb is already under way.

Since the budgets of international food aid agencies are set well in advance, a rise in food prices shrinks food assistance. The U.N. World Food Programme (WFP), which is now supplying emergency food aid to 37 countries, is cutting shipments as prices soar. The WFP reports that 18,000 children are dying each day from hunger and related illnesses.

As grain prices climb, a politics of food scarcity is emerging as exporting countries restrict exports to limit the rise in domestic food prices. At the end of January, Russia—one of the top five wheat exporters—will impose a 40-percent export tax on wheat, effectively banning exports. Argentina, another leading wheat exporter, closed export registrations for wheat indefinitely in early December until it could assess the condition of the new crop. And Viet Nam, the number two rice exporter after Thailand, has banned rice exports for several months and will likely not lift this ban

until the new crop comes to market.

Rising food prices are translating into social unrest. It began in early 2007 with tortilla demonstrations in Mexico. Then came pasta protests in Italy. More recently, rising bread prices in Pakistan have become a source of unrest. In Jakarta, 10,000 Indonesians gathered in front of the presidential palace on January 14th this year to protest the doubling of soybean prices that has raised the price of tempeh, the national soy-based protein staple. When a supermarket in Chongqing, China, where cooking oil prices have soared, offered this oil at a reduced price, the resulting stampede when doors opened killed three people and injured 31.

As economic stresses translate into political stresses, the number of failing states, such as Afghanistan, Somalia, Sudan, the Democratic Republic of the Congo, and Haiti, which was already increasing before the rise in food prices began, could increase even faster.

There is much to be concerned about on the food front. We enter this new crop year with the lowest grain stocks on record, the highest grain prices ever, the prospect of a smaller U.S. grain harvest as several million acres of land that shifted from soybeans to corn last year go back to soybeans, the need to feed an additional 70 million people, and U.S. distillers wanting 33 million more tons of grain to supply the new ethanol distilleries coming online this year. Corn futures prices for December 2008 delivery are higher than those for March, suggesting that market analysts see even tighter supplies after the next harvest.

Whereas previous dramatic rises in world grain prices were weather-induced, this one is policy-induced and can be dealt with by policy adjustments. The crop fuels program that currently satisfies scarcely 3 percent of U.S. gasoline needs is simply not worth the human suffering and political chaos it is causing. If the entire U.S. grain harvest were converted into ethanol, it would satisfy scarcely 18 percent of our automotive fuel needs.

The irony is that U.S. taxpayers, by subsidizing the conversion of grain into ethanol, are in effect financing a rise in their own food prices. It is time to end the subsidy for converting food into fuel and to do it quickly before the deteriorating world food situation spirals out of control.

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FOR ADDITIONAL INFORMATION

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